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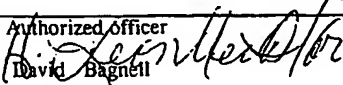
INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/24399

A. CLASSIFICATION OF SUBJECT MATTER		
IPC(7) : E21B 19/16; 43/00		
US CL : 166/380, 207		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols)		
U.S. : 166/380, 207, 209, 212, 216, 217		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4,420,866 A (MUELLER) 20 December 1983 (20.12.83), figure 1.	1, 6, 8, 11, 13

Y		4
X	US 6,085,838 A (VERCAEMER et al.) 11 July 2000 (11.07.00), figures 5-7.	8

Y		4
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
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Date of the actual completion of the international search	Date of mailing of the international search report	
24 September 2002 (24.09.2002)	20 FEB 2004	
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230	Authorized Officer  David Bagnell Telephone No. (703) 308-1113	

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